

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) Facility for producing synthesis gas from a solid feedstock including organic matter, said facility including means for circulating a heat-carrying solid providing at least some of the heat necessary for such production, a zone Z1 including pyrolysis and gasification means, a zone Z2 including separation means, a line for supplying gaseous and solid effluents from zone Z1 to zone Z2, a zone Z3 including gasification means, a zone Z4 including separation means, and a zone Z5 including combustion means, characterized in that zone Z1 has means for pyrolysis and gasification of said feedstock in a transported fluidized bed of the heat-carrying solid, in that zone Z2 has means for at least partial separation of the effluents from zone Z1 into an essentially gaseous phase and into an essentially solid phase comprising solid residue and heat-carrying solid, in that zone Z3 is supplied at least in part with said essentially solid phase and includes a dense fluidized bed gasification means of the heat-carrying solid for gasification of the solid residue of said essentially solid phase, in that zone Z4 includes means for separating the effluents coming from zone Z3 into an essentially gaseous phase-a synthesis gas and into an essentially entrained solid phase, and in that zone Z5 includes means for combusting the essentially a solid phase comprising solid residue not converted into synthesis gas and spent heat-carrying solid coming from zone Z3 through a line directly connecting said zone Z3 to said zone Z5, and means for

transferring the heat-carrying solid coming from said combustion zone Z5 into zone Z1.

2. (Currently Amended) Facility according to Claim 1 wherein zone Z5 has means for combusting the essentially entrained solid phase coming from zone Z4.

3. (Previously Presented) Facility according to Claim 1 wherein said pyrolysis/gasification zone Z1 includes means for supplying a reactive carrier gas, means for introducing said feedstock, and means for injecting the heat-carrying solid.

4. (Previously Presented) Facility according to Claim 1 wherein said combustion zone Z5 has means for introducing an oxidizing gas and means for transferring the heat-carrying solid coming from said combustion, to zone Z1.

5. (Previously Presented) Facility according to Claim 1 including means for transferring the essentially gaseous phase coming from zone Z2, to separation zone Z4.

6. (Currently Amended) Facility according to Claim 1 wherein said zone Z5 includes:

- a first zone Z5 including transported fluidized bed combustion means for combusting part of the essentially solid phase coming from zone Z3 and/or the entrained solid phase coming from zone Z4,

- a zone Z6 for separating the gaseous phase and the essentially solid phase coming from said combustion,

- a zone Z7 including dense fluidized bed combustion means for combusting the essentially solid phase coming from zone Z6 and means for transferring the heat-carrying solid coming from said combustion, to zone Z1.

7. (Previously Presented) Facility according to Claim 1 wherein zone Z3 includes reactive carrier gas supply means.

8. (Previously Presented) Facility according to Claim 1 wherein zone Z3 includes means for introducing the feedstock.

9. (Previously Presented) Facility according to Claim 1 wherein said zone Z5 includes means for supplying an additional fuel.

10-19. (Canceled).

20. (Previously Presented) Facility according to Claim 2 wherein said pyrolysis/gasification zone Z1 includes means for supplying a reactive carrier gas, means for introducing said feedstock, and means for injecting the heat-carrying solid.

21. (Previously Presented) Facility according to Claim 2 wherein said combustion zone Z5 has means for introducing an oxidizing gas and means for transferring the heat-carrying solid coming from said combustion, to zone Z1.

22. (Previously Presented) Facility according to Claim 2 including means for transferring the essentially gaseous phase coming from zone Z2, to separation zone Z4.

23. (Currently Amended) Facility according to Claim 2 wherein said zone Z5 includes:

- a first zone Z5 including transported fluidized bed combustion means for combusting part of the essentially-solid phase coming from zone Z3 and/or the entrained solid phase coming from zone Z4,
- a zone Z6 for separating the gaseous phase and the essentially solid phase coming from said combustion,
- a zone Z7 including dense fluidized bed combustion means for combusting the essentially solid phase coming from zone Z6 and means for transferring the heat-carrying solid coming from said combustion, to zone Z1.

24. (Previously Presented) Facility according to Claim 2 wherein zone Z3 includes reactive carrier gas supply means.

25. (Previously Presented) Facility according to Claim 2 wherein zone Z3 includes means for introducing the feedstock.

26. (Previously Presented) Facility according to Claim 2 wherein said zone Z5 includes means for supplying an additional fuel.

27. (Canceled)

28. (New) Facility according to Claim 1 wherein the heat-carrying solid comprises at least one material selected from the group consisting of ores of dolomite, ores of mica, ores of olivine, ores of trona, ores of borax, ores of bentonite, derivatives of ores of dolomite, derivatives of ores of mica, derivatives of ores of olivine, derivatives of ores of trona, derivatives of ores of borax, derivatives of ores of bentonite, an inert support impregnated by metal, metal salts or by alkaline or alkaline-earth salts, and an active support comprising at least one material selected from the group consisting of alumina, dolomite, olivine and charcoal impregnated by metal, metal salts or by alkaline or alkaline-earth salts.